

Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of claims in the application:

Listing of Claims:

1-4. (Canceled).

5. (New) An apparatus for classifying elements, in which an element is defined by a vector of feature values, the apparatus comprising:

a classifier arrangement including a plurality of classifiers, each operable, in respect of an element to be classified, to receive a different predetermined subset of the feature values from the element feature vector, wherein, in operation, each said classifier is trained in respect of a predetermined set of classes using training data representative of elements in each said class; and

a combining arrangement operable to combine outputs from the plurality of classifiers to determine which of the predetermined classes to associate with an element to be classified,

wherein each of said different predetermined subsets of feature values include a different cyclic selection of the feature values such that, in operation, adjacent feature values in an element feature vector are input to different ones of said plurality of classifiers and all feature values are input to at least one classifier.

6. (New) The apparatus of claim 5, arranged for use in classifying pixels in a hyperspectral image, wherein each of said feature vector values is associated with a different respective frequency band in the hyperspectral image.

7. (New) The apparatus of claim 6, wherein each of said feature vector values represents an intensity of light in a respective frequency band.

8. (New) A method for classifying elements, in which an element is defined by a vector of feature values, the method comprising:

using, for each a set of predetermined classes, a training dataset representative of elements in the class to train a plurality of classifiers in respect of the class, wherein each classifier is operable to receive feature vector values in respect of a different predetermined cyclic selection of features such that adjacent feature values in an element feature vector are input to

different ones of said plurality of classifiers and all feature values are input to at least one classifier;

receiving a feature vector for an element to be classified;

inputting the received feature vector values to said plurality of trained classifiers according to said predetermined cyclic selections and generating a plurality of classifier outputs; and

combining the classifier outputs to determine which of said predetermined classes to associate with the element to be classified.

9. (New) The method of claim 8, wherein the elements are within an image.

10. (New) The apparatus of claim 5, wherein the elements are within an image.